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EXAMINER	
BELL, MELTIN	

ART UNIT	PAPER NUMBER
2129	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/757,015	AHMED, SAJID	
	Examiner	Art Unit	
	Meltin Bell	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) *1-5* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 December 2004 and 13 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/16/04*.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *3/8/05*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **09/757,015** filed **01/08/2001,** the Information Disclosure Statement (IDS) and Amendment both filed 12/16/04 as well as the 3/8/05 Interview with Attorney Barry Davison. Claims 6-25 filed by the applicant have been entered and examined. An action on the merits of claims 6-25 appears below.

Priority

Applicant's claim for domestic priority against provisional application number 60/175,106 filed 01/06/2000 under 35 U.S.C. 119(e)/**120** is acknowledged. However, the provisional application upon which priority is claimed has expired and fails to provide adequate support under 35 U.S.C. 112 for claims 10 and 19 of this application in that algorithm 42 is not disclosed in the provisional application.

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

> The oath or declaration is defective because:
> It does not state that the person making the oath or declaration has reviewed and **understands** the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6 and 15 stand rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims (e.g. "ranking", "configuring", "inputting") raise a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. For example, if claim 6 was amended to recite a computer-implemented method and required performance of a result (e.g. alternatives) outside of a computer, it will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Claim Rejections - 35 USC § 103

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-9, 11-14 and 24 are rejected under 35 U.S.C. 103(a) as being obvious over *Altschuler et al* USPN 4,872,122 "Interactive statistical system and method for predicting expert decisions" (Oct. 3, 1989) in view of *Lawrence et al* USPN 6,272,481 "Hospital-based integrated medical computer system for processing medical and patient information using specialized functional modules" (Filed Sep. 14, 1998).

Regarding claim 6:

Altschuler et al teaches,

- A method for ranking a set of alternatives (Fig. 6; column 10, lines 3-7) according to likelihood (column 4, lines 42-54)

- (a) configuring, in one or a plurality of electronic databases (column 9, lines 5-10) stored in a storage device of a computer, a set of alternatives, a query set comprising at least one query (column 3, lines 11-21), and a set of primary bias values (Abstract), wherein each primary bias value directly associates a particular query with a particular alternative of the set of alternatives, and reflects at least one human expert's prior conception of the degree of predictive value of the query for the particular alternative relative to others

- (b) inputting a user's response to the query into the computer (Fig. 1A, item 12)

- (c) ranking, using a software program (column 2, lines 47-57) stored on the storage device to receive and process the user's response, the alternatives according to relative likelihood, based at least in part on the set of primary bias values (Fig. 6; column 10, lines 24-44)

However, *Altschuler et al* doesn't explicitly teach using a software program stored on the storage device that is operative with a processor of the computer while *Lawrence et al* teaches,

- using a software program stored on the storage device that is operative with a processor of the computer (Abstract; Fig. 3)

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for processing medical and patient information and for evolving medical knowledge, diagnoses and prognoses (*Lawrence et al*, column 2, lines 51-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Altschuler et al* as taught by *Lawrence et al* for the purpose of processing medical/patient information.

Regarding claim 7:

The rejection of claim 7 is similar to that for claim 6 as recited above since the stated limitations of the claim are set forth in the references. Claim 7's limitations difference is taught in *Altschuler et al*:

- ranking the set of alternatives further comprises querying the one or more electronic databases to generate at least one secondary bias value that is based on the

corresponding primary bias value and the response to the query, wherein each secondary bias value is associated with a particular alternative of the set of alternatives, and reflects the expert prior conception of the degree of predictive value of the query and response for the particular alternative relative to others, and wherein ranking is based, at least in part, on the secondary bias values, or at least in part on a combination of the primary and secondary bias values (column 10, lines 7-12)

Regarding claims 8:

The rejection of claim 8 is similar to that for claim 7 as recited above since the stated limitations of the claim are set forth in the references. Claim 8's limitations difference is taught in *Altschuler et al*:

- generating the second bias values involves increasing, decreasing or conserving the corresponding primary bias values based on the response to the query (column 3, lines 48-60)

Regarding claims 9:

The rejection of claim 9 is similar to that for claim 7 as recited above since the stated limitations of the claim are set forth in the references. Claim 9's limitations difference is taught in *Altschuler et al*:

- wherein the query set comprises a plurality of queries, and wherein ranking the alternatives involves summing (column 13, lines 13-46) and averaging (column 5, lines 45-48) of at least one of primary and secondary bias values

Regarding claims 11:

The rejection of claim 11 is similar to that for claim 6 as recited above since the stated limitations of the claim are set forth in the references. Claim 11's limitations difference is taught in *Altschuler et al*:

- wherein the set of alternatives is a set of alternate medical diagnoses or conditions, wherein the expert is a medical expert (Abstract), and wherein ranking the alternatives provides a list of alternate medical diagnoses or conditions, ranked according to likelihood (column 12, lines 12-19)

Regarding claim 12:

Altschuler et al teaches,

- A computer (column 11, lines 14-31) apparatus for ranking a set of alternatives (Fig. 6; column 10, lines 3-7) according to likelihood (column 4, lines 42-54), comprising:

- (a) a computer and at least one storage device connected thereto (column 11, lines 14-18),

- (b) a database (column 9, lines 5-10) of alternatives (Fig. 6; column 10, lines 3-7), comprising a stored set of alternatives

- (c) a database of queries (column 3, lines 11-21), comprising a stored set of at least one query;

- (d) a primary bias value database, comprising a stored set of primary bias values (Abstract), wherein each primary bias value directly associates a particular query with a particular alternative of the set of alternatives, and reflects at least one human expert's

prior conception of the degree of predictive value of the query for the particular alternative relative to others

- (e) a stored software program (column 2, lines 47-57) to receive and process a user's response to the query, and to rank the alternatives according to relative likelihood based, at least in part, on the set of primary bias values

However, *Altschuler et al* doesn't explicitly teach a computer having a processor or a stored software program operative with the processor while *Lawrence et al* teaches,

- a computer having a processor (Abstract; Fig. 3)

- a stored software program operative with the processor (column 6, lines 3-9)

Motivation – The portions of the claimed apparatus would have been a highly desirable feature in this art for processing medical and patient information and for evolving medical knowledge, diagnoses and prognoses (*Lawrence et al*, column 2, lines 51-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Altschuler et al* as taught by *Lawrence et al* for the purpose of processing medical/patient information.

Regarding claim 13:

The rejection of claim 13 is similar to that for claim 12 as recited above since the stated limitations of the claim are set forth in the reference. Claim 13's limitations difference is taught in *Lawrence et al*:

- a user database, comprising user information, wherein the program is operative with the processor to store, access and update user information when new user information is received (column 11, lines 49-62)

Regarding claim 14:

The rejection of claim 14 is similar to that for claim 13 as recited above since the stated limitations of the claim are set forth in the reference. Claim 14's limitations difference is taught in *Lawrence et al*:

- the program is further operative with the processor to track the user information (column 5, lines 18-33)

Regarding claim 24:

The rejection of claim 24 is the same as that for claims 12 and 7 as recited above since the stated limitations of the claim are set forth in the references.

Claims 15-18, 20-23 and 25 are rejected under 35 U.S.C. 103(a) as being obvious over *Altschuler et al* in view of *Lawrence et al* and in further view of *Ridgeway et al* USPN 6,012,052 "Methods and apparatus for building resource transition probability models for use in pre-fetching resources, editing resource link topology, building resource link topology templates, and collaborative filtering" (Jan. 4, 2000).

Regarding claim 15:

Altschuler et al teaches,

- A method for ranking a set of alternatives (Fig. 6; column 10, lines 3-7) according to likelihood (column 4, lines 42-54), comprising:

- (a) configuring, in one or a plurality of electronic databases (column 9, lines 5-10), a set of alternatives, a query set comprising at least one query (column 3, lines 11-21), and a set of primary bias values (Abstract), wherein each primary bias value directly

associates a particular query with a particular alternative of the set of alternatives, and reflects at least one human expert's prior conception of the degree of predictive value of the query for the particular alternative relative to others

- (b) inputting a user's response to the query into a computer through a user subsystem (Fig. 1A, item 12)

- (d) ranking, using a software program (column 2, lines 47-57) to receive and process the user's response, the alternatives according to relative likelihood, based at least in part on the set of primary bias values (Fig. 6; column 10, lines 24-44)

However, *Altschuler et al* doesn't explicitly teach a method over a wide-area network, a plurality of electronic databases of a server, (c) transmitting the user's response to the server over the wide-area network, a software program that is operative with a processor of the server or (e) transmitting the ranked set of alternatives to the user subsystem over the wide-area network, whereby the set of alternatives is ranked according to likelihood while *Lawrence et al* teaches

- a plurality of electronic databases (Fig. 3, items 317, 321, 323)

- a software program that is operative with a processor (column 6, lines 3-9)

Ridgeway et al teaches,

- A method (Title), over a wide-area network (column 1, lines 26-33)

- (c) transmitting the user's response to the server (column 24, lines 20-27) over the wide-area network

- a database of a server (Fig. 5; column 18, lines 21-36) and a software program that is operative with a processor of the server

- (e) transmitting the ranked set of alternatives to the user subsystem over the wide-area network, whereby the set of alternatives is ranked according to likelihood (column 30, lines 64-67; column 31, lines 1-6)

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for processing medical and patient information and for evolving medical knowledge, diagnoses and prognoses (*Lawrence et al*, column 2, lines 51-54) as well as using resource pre-fetching to better utilize processing resources and bandwidth of communications channels (*Ridgeway et al*, column 4, lines 11-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Altschuler et al* as taught by *Lawrence et al* and *Ridgeway et al* for the purpose of processing medical/patient information as well as better utilizing resources/communications bandwidth.

Regarding claim 16:

The rejection of claim 16 is similar to that for claim 15 as recited above since the stated limitations of the claim are set forth in the references. Claim 16's limitations difference is taught in *Altschuler et al*:

- ranking the set of alternatives further comprises querying the one or more electronic databases to generate at least one secondary bias value that is based on the corresponding primary bias value and the response to the query, wherein each secondary bias value is associated with a particular alternative of the set of alternatives, and reflects the expert prior conception of the degree of predictive value of the query and response for the particular alternative relative to others, and wherein ranking is

based, at least in part, on the secondary bias values, or at least in part on a combination of the primary and secondary bias values (column 10, lines 7-12)

Ridgeway et al:

- a database of the server (Fig. 5; column 18, lines 21-36)

Regarding claim 17:

The rejection of claim 17 is similar to that for claims 16 and 8 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 18:

The rejection of claim 18 is similar to that for claims 16 and 9 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 20:

The rejection of claim 20 is similar to that for claims 15 and 11 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 21:

Altschuler et al teaches,

- A computer apparatus for ranking a set of alternatives (Fig. 6; column 10, lines 3-7) according to likelihood (column 4, lines 42-54), comprising:

- (b) a database of alternatives (column 9, lines 5-10), comprising a stored set of alternatives

- (c) a database of queries (column 3, lines 11-21), comprising a stored set of at least one query

- (d) a primary bias value (Abstract) database, comprising a stored set of primary bias values, wherein each primary bias value directly associates a particular query with a particular alternative of the set of alternatives, and reflects at least one human expert's prior conception of the degree of predictive value of the query for the particular alternative relative to others

- (e) a stored software program (column 2, lines 47-57) to receive and process, from a user subsystem, a user's response to the query, and to rank the alternatives according to relative likelihood based, at least in part, on the set of primary bias values (Fig. 6; column 10, lines 24-44)

However, *Altschuler et al* doesn't explicitly teach a computer network apparatus, (a) a server having a processor and at lease one storage device connected to the processor or a stored software program operative with the processor for transmission to the user subsystem while *Lawrence et al* teaches

- A computer network apparatus (Abstract; Fig. 3)

- a plurality of electronic databases (Fig. 3, items 317, 321, 323)

- a stored software program operative with the processor (column 6, lines 3-9)

Ridgeway et al teaches,

- A computer network apparatus (column 1, lines 26-33)

- (a) a server having a processor and at lease one storage device connected to the processor (Fig. 5; column 18, lines 21-36)

- (e) a stored software program operative with the processor to receive and process, from a user subsystem, a user's response to the query, and to rank the alternatives

according to relative likelihood based (column 30, lines 64-67; column 31, lines 1-6), at least in part, on the set of primary bias values, for transmission to the user subsystem (column 24, lines 20-27)

Motivation – The portions of the claimed apparatus would have been a highly desirable feature in this art for processing medical and patient information and for evolving medical knowledge, diagnoses and prognoses (*Lawrence et al*, column 2, lines 51-54) as well as using resource pre-fetching to better utilize processing resources and bandwidth of communications channels (*Ridgeway et al*, column 4, lines 11-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Altschuler et al* as taught by *Lawrence et al* and *Ridgeway et al* for the purpose of processing medical/patient information as well as better utilizing resources/communications bandwidth.

Regarding claim 22:

The rejection of claim 22 is the same as that for claims 21 and 13 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 23:

The rejection of claim 23 is the same as that for claims 21 and 14 as recited above since the stated limitations of the claim are set forth in the reference.

Regarding claim 25:

The rejection of claim 25 is the same as that for claims 21 and 7 as recited above since the stated limitations of the claim are set forth in the reference.

Claim 10 is rejected under 35 U.S.C. 103(a) as being obvious over *Altschuler et al* in view of *Lawrence et al.*

Regarding claim 10:

Altschuler et al teaches,

- A method for ranking a set of alternatives (Fig. 6; column 10, lines 3-7) according to likelihood (column 4, lines 42-54)

- (a) configuring, in one or a plurality of electronic databases (column 9, lines 5-10) stored in a storage device of a computer, a set of alternatives, a query set comprising at least one query (column 3, lines 11-21), and a set of primary bias values (Abstract), wherein each primary bias value directly associates a particular query with a particular alternative of the set of alternatives, and reflects at least one human expert's prior conception of the degree of predictive value of the query for the particular alternative relative to others

- (b) inputting a user's response to the query into the computer (Fig. 1A, item 12)

- (c) ranking, using a software program (column 2, lines 47-57) stored on the storage device to receive and process the user's response, the alternatives according to relative likelihood, based at least in part on the set of primary bias values (Fig. 6; column 10, lines 24-44)

- ranking the set of alternatives further comprises querying the one or more electronic databases to generate at least one secondary bias value that is based on the corresponding primary bias value and the response to the query, wherein each secondary bias value is associated with a particular alternative of the set of alternatives,

and reflects the expert prior conception of the degree of predictive value of the query and response for the particular alternative relative to others, and wherein ranking is based, at least in part, on the secondary bias values, or at least in part on a combination of the primary and secondary bias values (column 10, lines 7-12)

Altschuler et al doesn't explicitly teach using a software program stored on the storage device that is operative with a processor of the computer and generating secondary bias values, and ranking the alternatives is achieved, at least in part, by using algorithm 42 while *Lawrence et al* teaches,

- using a software program stored on the storage device that is operative with a processor of the computer (Abstract; Fig. 3).

However, Examiner takes Official Notice that generating secondary bias values, and ranking the alternatives is achieved, at least in part, by using algorithm 42 is conventional and well-known (*Islam et al, USPN 6,115,712,* "Mechanism for combining data analysis algorithms with databases on the internet").

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for processing medical and patient information and for evolving medical knowledge, diagnoses and prognoses (*Lawrence et al*, column 2, lines 51-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Altschuler et al* as taught by *Lawrence et al* for the purpose of processing medical/patient information. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate secondary bias values, and rank the alternatives, by using algorithm 42, at least in part,

since Examiner takes Official Notice that generating secondary bias values, and ranking the alternatives is achieved, at least in part, by using algorithm 42 is conventional and well-known to at least *Islam et al.*

Claim 19 is rejected under 35 U.S.C. 103(a) as being obvious over *Altschuler et al* in view of *Lawrence et al* and in further view of *Ridgeway et al.*

Regarding claim 19:

Altschuler et al teaches,

- A method for ranking a set of alternatives (Fig. 6; column 10, lines 3-7) according to likelihood (column 4, lines 42-54), comprising:
- (a) configuring, in one or a plurality of electronic databases (column 9, lines 5-10), a set of alternatives, a query set comprising at least one query (column 3, lines 11-21), and a set of primary bias values (Abstract), wherein each primary bias value directly associates a particular query with a particular alternative of the set of alternatives, and reflects at least one human expert's prior conception of the degree of predictive value of the query for the particular alternative relative to others
- (b) inputting a user's response to the query into a computer through a user subsystem (Fig. 1A, item 12)
- (d) ranking, using a software program (column 2, lines 47-57) to receive and process the user's response, the alternatives according to relative likelihood, based at least in part on the set of primary bias values (Fig. 6; column 10, lines 24-44)

- ranking the set of alternatives further comprises querying the one or more electronic databases to generate at least one secondary bias value that is based on the corresponding primary bias value and the response to the query, wherein each secondary bias value is associated with a particular alternative of the set of alternatives, and reflects the expert prior conception of the degree of predictive value of the query and response for the particular alternative relative to others, and wherein ranking is based, at least in part, on the secondary bias values, or at least in part on a combination of the primary and secondary bias values (column 10, lines 7-12)

Altschuler et al doesn't explicitly teach a method over a wide-area network, a plurality of electronic databases of a server, (c) transmitting the user's response to the server over the wide-area network, a software program that is operative with a processor of the server, (e) transmitting the ranked set of alternatives to the user subsystem over the wide-area network, whereby the set of alternatives is ranked according to likelihood and generating secondary bias values, and ranking the alternatives is achieved, at least in part, by using algorithm 42 while *Lawrence et al* teaches

- a plurality of electronic databases (Fig. 3, items 317, 321, 323)
- a software program that is operative with a processor (column 6, lines 3-9)

Ridgeway et al teaches,

- A method (Title), over a wide-area network (column 1, lines 26-33)
- (c) transmitting the user's response to the server (column 24, lines 20-27) over the wide-area network

- a database of a server (Fig. 5; column 18, lines 21-36) and a software program that is operative with a processor of the server

- (e) transmitting the ranked set of alternatives to the user subsystem over the wide-area network, whereby the set of alternatives is ranked according to likelihood (column 30, lines 64-67; column 31, lines 1-6).

- a database of the server (Fig. 5; column 18, lines 21-36).

However, Examiner takes Official Notice that generating secondary bias values, and ranking the alternatives is achieved, at least in part, by using algorithm 42 is conventional and well-known (*Islam et al, USPN 6,115,712,* "Mechanism for combining data analysis algorithms with databases on the internet").

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for processing medical and patient information and for evolving medical knowledge, diagnoses and prognoses (*Lawrence et al*, column 2, lines 51-54) as well as using resource pre-fetching to better utilize processing resources and bandwidth of communications channels (*Ridgeway et al*, column 4, lines 11-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Altschuler et al* as taught by *Lawrence et al* and *Ridgeway et al* for the purpose of processing medical/patient information as well as better utilizing resources/communications bandwidth. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate secondary bias values, and rank the alternatives, by using algorithm 42, at least in part, since Examiner takes Official Notice that generating secondary bias values, and ranking

the alternatives is achieved, at least in part, by using algorithm 42 is conventional and well-known to at least *Islam et al.*

RESPONSE TO APPLICANTS' AMENDMENT REMARKS

Applicant argues that no new matter has been added in the claims, drawings and specification amendments (Amendment REMARKS page 11, last two paragraphs).

Drawings, Specification, Information Disclosure Statement (IDS) and Claim Objections

Applicant(s) argue(s) that the amendments to the specification for Figs. 7 and 8 as well as the Fig. 27 revisions obviate earlier objections (Amendment REMARKS page 12, paragraphs 1-4). The Fig. 8 amendments to the specification have been entered, examined and are approved. However, it is noted that the remaining specification amendments do not address the Fig. 7 objection: It is still unclear how the values in the ACL, PCL and MM Tear columns relate to fuzzy logic membership functions as the fuzzy primary bias data set as suggested on page 13, paragraph 6. The revision to Fig. 27 is also missing required labeling:

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the

changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Applicant argues that amendments to the specification regarding page 14, paragraph 1 and trademarks are responsive to the Examiner's comments (Amendment REMARKS page 20, paragraphs 2-10). However, it is noted that the phrase "and simple as activators" on page 14, paragraph 1 and page 23, paragraph 5 has been

removed on page 14, paragraph 1 and amended to "and not simply as activators" on page 23, paragraph 5. In addition to the Fig. 7 drawing related objection, the use of trademarks FILEMAKER PRO, PERL SCRIPT and UNIX OS on page 21, paragraph 5 prevent the withdrawal of the specification objections.

Applicant argues that the Turban and McNeil references have been included in an IDS in response to the Examiner's comments (Amendment REMARKS page 20, paragraphs 2 and 9). However, it is noted that copies of the references were not submitted. Consequently, the IDS fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed, such as the pages to be considered in the McNeil reference. It has been placed in the application file, but the information referred to therein has not been considered.

Applicant's specification and drawings arguments have been fully considered, but are not persuasive. The objections to the specification and drawings stand. Also, claims 10, 19 and 21 are objected to because of the following informalities:

Regarding Claim 10:

- 'algorithm 42' would read well if replaced by method steps from the specification between pages 32 and 38 (EXAMPLE 1) further limiting the claim

Regarding Claim 19:

- 'algorithm 42' would read well if replaced by method steps from the specification between pages 32 and 38 (EXAMPLE 1) further limiting the claim

Regarding Claim 21:

- 'lease' would read well as 'least' on page 9, line 9.

Appropriate correction is required.

Claim Rejections - 35 USC § 112, second paragraph

Applicant requests withdrawal of the indefiniteness rejection against claims 10 and 19 under 35 USC 112, 2nd paragraph due to the amendment removing ELICIT™ from the claims (Amendment REMARKS page 12, paragraphs 5-8). Applicant's request has been fully considered and is persuasive. The 35 USC 112, 2nd paragraph rejection of claims 10 and 19 is withdrawn.

Claim Rejections - 35 USC §102 and 35 USC §103

Applicant argues that *Lenz* USPN 5,784,539 qualities and quality values are fundamentally distinct from the instant bias values, that other claimed subject matter is absent from *Lenz* (Amendment REMARKS page 11, paragraph 4), *Lenz* alone or in combination with *Hekmatpour* USPN 5,870,768 does not describe, teach or otherwise suggest the instant inventive claimed subject matter for supporting a rejection under 35 USC 103 (Amendment REMARKS page 11, paragraph 5), (i) the teachings and elements of *Lenz* are fundamentally distinguishable from the instant invention, and (ii) the teachings of *Lenz* require particular essential elements that are not present in the inventive claimed subject matter such that anticipation by *Lenz* is impossible under 35 USC 102 (Amendment REMARKS page 13, paragraph 3).

Specifically, applicant argues that *Lenz* has no human expert-mediated direct association between input and output spaces (Amendment REMARKS page 15, paragraph 2) and the instant invention does not require *Lenz*'s non-human expert system inference engine, rules tables or matching algorithm (Amendment REMARKS page 16, paragraph 2). Applicant's arguments have been fully considered, but are moot in view of the above new grounds of rejection.

The examiner agrees that *Lenz* and *Hekmatpour* taken either individually or in combination do not disclose the methods and apparata of the inventions defined in claims 6-25. However, *Altschuler et al* USPN 4,872,122, *Lawrence et al* USPN 6,272,481 and *Ridgeway et al* USPN 6,012,052 are cited individually and in combination for explicitly and inherently disclosing the subject matter set forth in the claims by the applicants: bias values, a human expert-mediated direct association between input and output spaces, a plurality of electronic databases and transmitting a user's response to a server over the wide-area network, for examples.

The Abstract of *Altschuler et al* presents the instant bias values and human expert-mediated direct association between input and output spaces subject matter while column 1, lines 26-33 and column 24, lines 20-27 of *Ridgeway et al* teach transmitting a user's response to a server over the wide-area network and Fig. 3, items 317, 321, 323 of *Lawrence et al* suggest a plurality of electronic databases. Furthermore, the purpose and motivation for modifying *Altschuler et al* as taught by other references include processing medical/patient information (*Lawrence et al*, column

2, lines 51-54) as well as better utilizing resources/communications bandwidth (*Ridgeway et al*, column 4, lines 11-18).

As set forth above with regards to *Altschuler et al*, *Lawrence et al* and *Ridgeway et al*, the items listed explicitly and inherently teach each element of the applicants' claimed limitations. Applicants have not set forth any distinction or offered any dispute between the claims of the subject application, *Altschuler et al's* Interactive statistical system and method for predicting expert decisions, *Lawrence et al's* Hospital-based integrated medical computer system for processing medical and patient information using specialized functional modules and *Ridgeway et al's* Methods and apparatus for building resource transition probability models for use in pre-fetching resources, editing resource link topology, building resource link topology templates, and collaborative filtering .

Conclusion

The following prior art made of record is considered pertinent to applicant's disclosure:

- *Driscoll*; USPN 5,642,502; Method and system for searching for relevant documents from a text database collection, using statistical ranking, relevancy feedback and small pieces of text

- *Ahamed et al*; USPN 5,809,493; Knowledge processing system employing confidence levels

- *Zenner*; USPN 6,718,330; Predictive internet automatic work distributor (Pre-IAWD) and proactive internet automatic work distributor (Pro-IAWD)

- *Geller et al*; USPN 6,236,990; Method and system for ranking multiple products according to user's preferences

- *Wyard et al*; USPN 6,167,398; Information retrieval system and method that generates weighted comparison results to analyze the degree of dissimilarity between a reference corpus and a candidate document

- *Calvignac et al*; USPN 6,298,340; System and method and computer program for filtering using tree structure

- *Beall et al*; USPN 6,321,224; Database search, retrieval, and classification with sequentially applied search algorithms

- *McNeil et al*; Fuzzy Logic; 1993; pp 7-13

- *Turban*; Decisions support, Expert systems; third edition; 1993; pp v-vi, 510

- *Wood*; Algorithm 42: invert; Communications of the ACM; Vol. 4, Is. 4; April 1961; pp 176-182

- *Naur*; Remarks on algorithm 42: invert; Communications of the ACM; Vol. 6, Is. 1; January 1963; pp 38-40

- *Madhavji et al*; Elicit: a method for eliciting process models; 'Applying the Software Process'; Third International Conference on the Software Process Proceedings; 10-11 Oct. 1994; pp 111-122

Any inquiry concerning this communication or earlier communications from the Office should be directed to Meltin Bell whose telephone number is 571-272-3680. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:00 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MB
March 18, 2005

Anthony Knight
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Group 3600